

## Shingles Prevention Reduces Lost Time

### Employees Who Had Chickenpox at Risk

**Shingles and chickenpox are both caused by the varicella zoster virus (VZV).**

Public health officials recommend childhood vaccination to prevent chickenpox and vaccination against shingles for older adults. Only people who have had chickenpox can get shingles, also known as herpes zoster. The virus remains in a dormant state in the body before erupting as a painful rash later in life.

Reactivation mechanisms are not well understood. However, factors associated with a shingles outbreak include aging, suppressed immune system, fetal exposure to the virus or having had chickenpox at younger than 18 months old.

### Preventive Vaccines

Chickenpox is highly contagious and can cause serious illness in adults. In the U.S., most adults had chickenpox when they were young. The chickenpox vaccine licensed for use in 1995 now prevents an estimated 3.5 million cases, 9,000 hospitalizations and 100 deaths per year, according to the Centers for Disease Control and Prevention (CDC).

Adults annually account for about 5 percent of reported cases and 35 percent of deaths from chickenpox. About half of the estimated 1 million shingles cases reported annually in the U.S. occur in adults over 60.

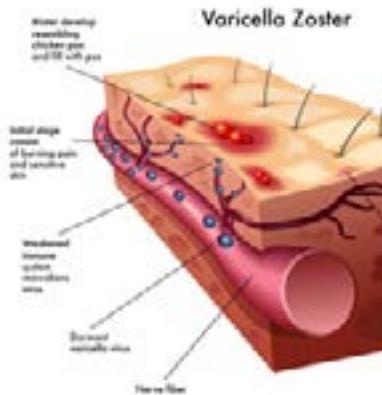
A shingles vaccine called Zostavax® was licensed by the Food and Drug Administration (FDA) in 2006. This vaccine reportedly reduces the risk of developing shingles by 51 percent and recurring nerve pain (post-herpetic neuralgia) by 67 percent. It is recommended for people 60 years and older.

Shingrix®, a new form of vaccine for shingles, was licensed Oct. 20, 2017, by the FDA for adults 50 years and older. In [clinical trials](#) the vaccine reduced the risk of developing herpes zoster by 97.2 percent (95 percent in people  $\geq 50$  years old and 89.8 percent in people  $\geq 70$  years old) and significantly reduced the overall incidence of nerve pain.

The national Advisory Committee on Immunization Practices has recommended its adoption as the preferred vaccine for preventing shingles and related complications for:

- healthy adults 50 and older
- adults who previously received [Zostavax](#)

People who have had shingles can still receive the vaccine to help prevent future occurrences. A medical professional should be consulted before getting vaccinated. Shingrix is not recommended for people with certain types of allergies. In addition to potential allergic reactions, there are other precautions for Zostavax.



Following anticipated approval by the CDC's director and publication in the *Morbidity and Mortality Weekly Report*, some insurance plans – including Medicare and Medicaid – are expected to start covering all or part of the cost of the vaccine. The vaccine manufacturer, GlaxoSmithKline, reports it should be widely available in 2018.

## Productivity Loss

Shingles in the workforce is linked to productivity loss and absence, especially among older employees. For example, in one study, employees who had shingles reported missing an average of 31.6 hours of work and experiencing an average of 84 hours of presenteeism – being on the job but not functioning at full capacity. Work loss tended to increase with age, along with the duration and severity of illness.

(Refer to [J Med Econ](#), 2011;14(5):639-45.)

In another study, herpes zoster and nerve pain were found to have a negative impact on the productive life of workers who had shingles.

(Refer to [Vaccine](#), 2012;30(12):2047-2050.)

Among survey respondents:

- 64 percent missed work and 76 percent reported decreased productivity
- There was a mean of 27 hours of absenteeism and 34 hours of presenteeism
- Higher pain severity and longer pain duration were associated with greater productivity loss

In both studies, the authors suggested findings should be used to inform decision-making around the promotion of vaccination to prevent shingles in older adults.

## Signs and Symptoms

Chickenpox causes a blister-like rash, itching, fatigue and fever. The rash appears first on the stomach, back and face and can spread over the entire body.

With shingles, people often experience pain, itching or tingling in a limited area where the shingles rash will appear. The rash typically develops as a stripe on one side of the body, and in some cases on one side of the face. In rare instances (usually among people with compromised immune systems), the rash may be more widespread. The shingles rash typically causes blisters, forms scabs in seven to 10 days and clears up within two to four weeks.

Other symptoms of shingles include fever, headache, chills and upset stomach.

Most people have one shingles episode, but it is possible for the rash to recur a second or even a third time. The most common complication of shingles is persistent, debilitating pain where the rash appeared. Shingles may also cause serious eye complications. In rare cases it may lead to pneumonia, hearing problems, blindness, brain inflammation (encephalitis) or death.



Shingles is not contagious. However, a person with rash blisters containing fluid can spread the virus to someone who has never had chickenpox and has not been vaccinated. The risk of a person with shingles spreading the virus is low if the rash is covered and a caregiver wears personal protection such as gloves and a mask.

In addition to covering the rash, people with shingles are advised to:

- Avoid touching or scratching the rash
- Frequently wash their hands
- Avoid contact with:
  - pregnant women who have never had chickenpox or the chickenpox vaccine
  - premature or low-birth-weight infants
  - people with weakened immune systems



## Shingles and Chickenpox Care

Antiviral medicines are available to treat shingles and help shorten the length and severity of the illness. They are most effective when they are started as soon as possible after the rash appears. People who have or suspect they have shingles are advised to consult a health care professional as soon as possible to discuss care and pain management options, including medications that will not interfere with the ability to work safely.

For both shingles and chickenpox rash, wet compresses, calamine lotion and colloidal oatmeal baths may help relieve itching. Keeping fingernails trimmed short may help prevent skin infections caused by scratching blisters. For chickenpox, non-aspirin medications, such as acetaminophen, are recommended to help relieve fever.

Adults with chickenpox should consult a health care professional if they experience complications such as high fever, hot or infected rash, confusion or difficulty breathing.

An annual physical is a good time to ask a qualified medical professional about the shingles shot and other preventive measures including seasonal flu vaccination, Tdap to protect against tetanus, diphtheria and pertussis (whooping cough), and vaccines to protect against serious pneumococcal diseases for adults over 65 years old.

## Resources

1. [www.cdc.gov/vaccines/vpd/shingles/public/index.html](http://www.cdc.gov/vaccines/vpd/shingles/public/index.html)
2. [www.cdc.gov/shingles/about](http://www.cdc.gov/shingles/about)
3. [www.cdc.gov/chickenpox/about](http://www.cdc.gov/chickenpox/about)
4. [www.cdc.gov/vaccines/hcp/vis/vis-statements/varicella.html](http://www.cdc.gov/vaccines/hcp/vis/vis-statements/varicella.html)
5. [Precautions for Health Care Personnel: www.cdc.gov/shingles/hcp](http://www.cdc.gov/shingles/hcp)